

Hierarchy of Pedagogical Stages (HoPS) for interactive whiteboard use.

John Vincent and Anthony Jones

An analysis tool developed from Beauchamp's "Transitional Framework" (Beauchamp (2004). Use of the interactive whiteboard in primary schools: towards an effective transition framework. Technology, Pedagogy and Education)

This tool is being used to analyse pedagogical changes that occurred during the implementation of interactive whiteboards within a mentoring professional development framework in a Victorian secondary school.

ELEMENTS OF PRACTICE			
Stages	Teacher skills	ICT usage	Classroom management and pedagogy
Substitution	Little file use	Mainly text and drawing, some learning objects.	Teacher only; presentation takes precedence over student interaction.
Experimental	Frequent loading of files. Pre-prepared lessons. Some downloading from internet	Wide use of pre-prepared resources. Occasional downloads of resources. Often many PowerPoint linear presentations	Students use the board under teacher direction: mainly dragging. Mainly whole class teaching of lesson topic Students write and manipulate text for a defined purpose under teacher direction
Interactional	Uses stored sequences of files. Captures image from various sources, including cameras and non-IWB inputs such as sound from microphones, document cameras etc. Uses hyperlinks.	Different programs for different purposes. Using native navigation to flip pages. Internet links for "if and when" use. Students build linear presentations for sharing with peers	Frequent student use of teacher materials needing manipulation (eg changing drawings, texts etc). Teacher revises and builds on previous ideas. Student choices built in. Expectations of students include informal and unplanned use of board. Students encouraged to build linear presentations (eg. PowerPoints).
Synergistic	Wide range of both teacher and student skills, including screen capture; digitized and recorded speech; animations. Students widely use native and other software, incl. complex nonlinear manipulative software incl. graphics manipulations, dynamic geometry, multimedia, Excel manipulatable macros.	IWB use embedded into most lessons without constraints. Teacher, with student help, may create complex learning objects (such as a game with embedded curriculum material). Student build cooperative texts/graphics, critical literacies, cooperative proof construction events etc.	Both teachers and students able to construct meaning, and control direction and step lengths of lessons. Students able, and encouraged, to prepare presentations, lessons and assessments. Development encouraged of socially constructed products (e.g. shared narrative). Students encouraged to insert their own structure into the learning.